

REASONS OF USING IT OUTSOURCING (ITO) – POLISH-SPANISH CROSS-CULTURAL ANALYSIS

Jolanta SŁONIEC*, Reyes GONZÁLEZ RODRIGUEZ**

*Lublin University of Technology, Faculty of Management, Lublin, POLAND

e-mail: j.slonec@pollub.pl

**University of Alicante, Department of Enterprise Organization

Campus Universitario de San Vicente del Raspeig, Alicante, SPAIN

e-mail: mr.gonzalez@ua.es

Abstract: The article compares the reasons for using IT outsourcing (ITO) in Polish and Spanish enterprises, based on the authors' own research. The reasons for the application of ITO have been classified into three groups: economic, technological, and organizational/strategic. On the basis of the classified reasons, a research hypothesis was formulated: Representatives of Polish enterprises assess other groups of reasons as the most important motivation for the use of ITO in their companies compared to Spanish enterprises. On the basis of the authors' own research, the hypothesis has been confirmed. Polish enterprises assess technological reasons as the most important, whereas Spanish enterprises consider organizational/strategic reasons to be the most important, although the differences in the assessment are not large. The difference in the validity of the reasons for the use of ITO may arise from the maturity of the ITO market in both countries but may also result from the personal experience of the companies with ITO.

Keywords: reasons, IT outsourcing, Poland, Spain.

JEL: L86, M15, N74, O14.

1 Introduction

IT outsourcing (ITO) is currently widely used on a global scale; it is also widely used in both compared countries. Historically, it was used earlier in Poland (under a different name but with a similar scope) than in Spain. In Spain, this service has been evenly and steadily developed in a comparable way to other developed countries. In Poland, rapid development of ITO occurred especially after economic changes in the 1980s, and this service has been intensively developing in our country since the beginning of 21st century.

ITO is the subject of research by scientists from all over the world, and foreign language publications regarding this area have been published since the turn of the 1980s. Since the beginning of research on outsourcing, the reasons that prompted enterprises to use this service have been identified and evaluated.

Enterprises use ITO because it is profitable for them and advantageous. The article presents and compares the motives that inclined to use this service by Polish

and Spanish companies. The validity of motives was identified based on the own research carried out by the authors in Poland and Spain.

2 Outline of the history of IT outsourcing in Spain and Poland

Outsourcing in contemporary societies is the result of a tendency towards progressive specialization and globalization. It has begun to gain popularity since the 1970s. In the 1970s and 1980s, there was a series of energy crises followed by a global recession. These factors contributed to lowering the economic results of large, integrated corporations.

The change in the situation on global markets determined a change in the business strategy previously characterized by the pursuit of concentration, toward new trend consisting in the focus of enterprises only on key activities. The new trend consisted in slimming the organization. According to this trend, companies should deal with activities related only to their core competences. It has been suggested that focusing on core competencies would bring a rapid in-

crease in profits. On the other hand, actions that were not included in the core competencies could and should be externalized.

Since the 1990s, the importance and value of outsourcing has grown. This trend coincided with the rapid development of information and communication technologies, growing globalization, and changes in consumer preferences. It also enabled the development of off-shore outsourcing, that is, outsourcing IT activities to companies that are territorially remote, often located on other continents. The price competition also contributed to this trend – an outsourcing contract with an Asian or with Central and Eastern Europe company could be much cheaper.

Initially, outsourcing was understood as the externalization of IT functions. This was understandable

because this type of outsourcing was most common at the time. The equating outsourcing with ITO lasted until the 1990s, when outsourcing began to be used also in other areas, for example, in logistics. At the turn of the century, outsourcing began to be considered as a management concept. Undoubtedly, the ITO has caused a rapid development of this management concept in recent decades.

ITO in Spain was initiated in the 1970s, at the same time as in other Western European countries. The first contracts for data processing were implemented at that time. During the implementation of the ITO contract, it was expected from a specialized supplier to use the best equipment and the most skilled human resources it had.

Fig. 1 shows the evolution of outsourcing in time from an integrated enterprise to a virtual one.

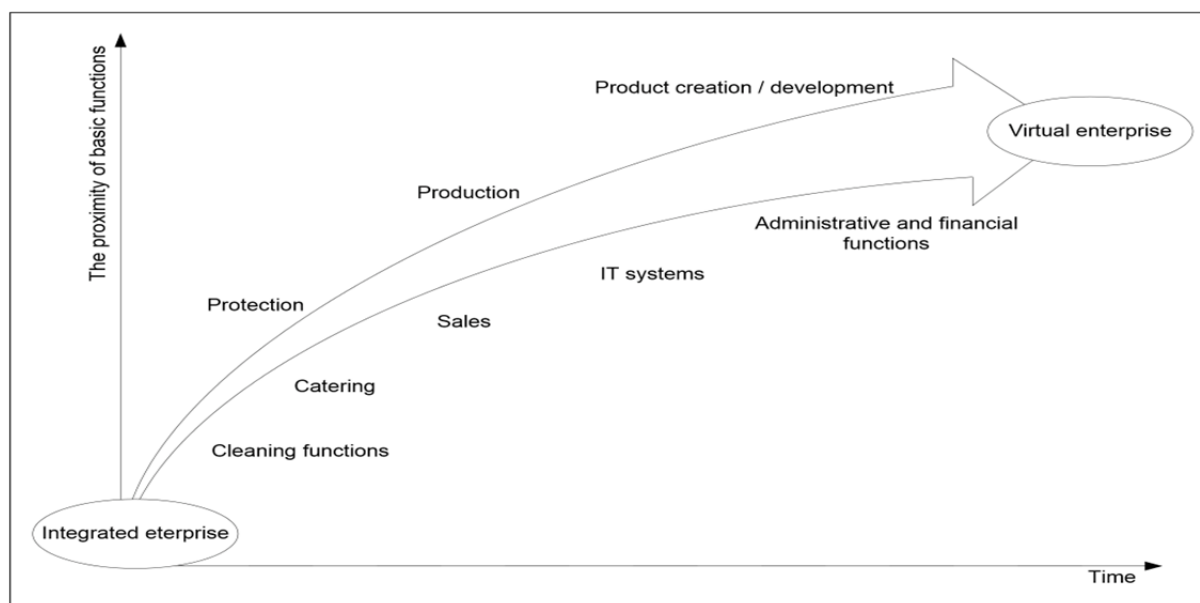


Figure 1. Outsourcing evolution (Source: Rivo López, 1999)

The development of ITO in Poland was ahead of the development of the industry in the world, although at that time such services were not called outsourcing. The precursor of ITO in Poland was a state-owned enterprise ZETO (electronic computing facilities) created by the order of the Chairman of the Science and Technology Committee in 1964 with offices in several large Polish cities. The company's task was to provide services consisting in the collection and processing of data in digital form from state institutions, organizations, and enterprises.

In the following years, ZETO was subject to many transformations, companies in some cities were closed, but to this day, there are some which have been transformed and under changed names provide ITO services. The case of ZETO shows that Poland was very early in the group of countries developing computational techniques, among them, ITO services.

It should be added that the development of ITO was halted during the economic changes of the 1980s

and 1990s and that its wider development under the current name took place in Poland in the late 1990s and in the next decade.

The phenomenon of globalization contributed to the development of ITOs by commissioning production processes to regions and countries where labor costs are lower (Heeks et al., 2001). The second reason was the widespread acceptance of the Internet's use as a medium of communication, which is, for example, in application outsourcing (Marchand & Jacobsen, 2001).

Outsourcing is used in many business areas of modern enterprises. The IT industry in outsourcing is one of the industries that are developing the fastest today. Research conducted in 2015 by Orange indicates the advantages reported by companies using this service. It was found that 63% of large companies and corporations believe that ITO allows for building a competitive advantage, 55% notice an increase in its importance in recent years, and almost half (45%) are able to admit that the use of ITO affects business efficiency (Baranowska-Skimina, 2015).

3 Why companies use ITO

ITO is considered to be a common practice in modern enterprises. It is used by enterprises of various industries and sizes, although large companies have started using it much earlier.

The reasons for the use of ITO have been the subject of the research by many scientists abroad. In the article by González, Gascó, and Llopis (2015), the reasons for using ITO included in publications of other scientists have been cataloged since the beginning of research on this phenomenon, that is, from 1992. The list presents a total of 90 reasons for the use of ITO, which is an impressive number. According to the evolution of the ITO cited by Trocki (2001), outsourcing was initially treated as a method of reducing costs, then as a way to reduce the risk of technological change, later as a concept of concentration on key activities, and, finally, as a strategic choice of functioning.

Table 1. Classification of reasons of ITO use (*Source:* own elaboration)

Groups of reasons			
Economic reasons	Technological reasons	Strategic reasons	Reasons related to the environment
<ul style="list-style-type: none"> • Cost reduction • The size of taxes • Financial liquidity • Improvement in cash flows • Saving production costs • Saving transaction costs • Financial freedom • Cost restructuring • Economic factors 	<ul style="list-style-type: none"> • Knowledge and technological resources • Guaranteed service and system availability • Access to the highest class technical staff • Technical reasons • Fast development of software • Improving quality and efficiency • Access to the latest technology • Reduction of technological risk • Improvement of technological flexibility • Faster changes • Expert access • Technological factors • Using the competence of suppliers • Flexibility with respect to changes • Access to new creative ideas • Elimination of problematic functions 	<ul style="list-style-type: none"> • Strategic factors • Corporate culture • Focus on key operations • Concentration on business • Flexibility • Concentration on strategic IT activities • The use of economies of scale • Synergy effect • The validity of basic competences 	<ul style="list-style-type: none"> • Political reasons • Market causes • Business reasons • Vendor pressure • Solving problems related to the labor market

Table 1 proposes a classification of the reasons of the ITO use as a function of the stages of ITO evolution.

Table 1 presents the answer to the question why companies use ITO. The reason can be one or multiple. Usually, it is not the case that companies are guided by one reason by outsource IT activities. There are usually many reasons. It often happens that other reasons affect the decision on ITO before making decisions, different at the beginning of using ITO, and different after some time of its application. As the company reorient and how its environment evolves over time, the motivations of companies that induce them to use ITO reorient.

In an earlier publication on business services, as a special manifestation of ITO, it was shown that enterprises much more often use business services in accordance with their development phases (business development phase is in the order: I - Network & Telecoms; II - shared services and centers of excellence; and III - global business services) (Spoz, et al., 2017). This means that companies use services from the first phase or services from the first and second phase or services from the first, second, and third phase. Such a dependence occurs for more than 70% of enterprises of the 70 surveyed companies.

On the basis of this conclusion, it can be assumed that a similar relationship may occur for reasons of ITO application. The reasons indicated by enterprises can fall into one of three groups, according to the ITO development phases. These would be economic reasons or economic and technological reasons or economic, technological, and strategic reasons, in this order. The supposed dependence presented here may be the subject of further research.

The study of differences in assessing the validity of reasons for ITO use in Polish and Spanish enterprises led the author's to formulate the following hypotheses: Polish enterprises' representatives assess other groups of reasons as the most important motivation for the use of ITO in their companies compared to Spanish enterprises. The expected differences in perceiving the validity of causes result from many premises. These may be differences in the current economic situation of enterprises (ongoing crisis in Spain and intensive development

in Poland); this may be the result of previous positive or negative experience of their own and other companies from the application of ITO; there may finally be differences in the maturity of the ITO market development in Poland and Spain.

4 Comparison of causes of ITO application in Polish and Spanish enterprises

In the cited studies, among the extensive list of reasons for the use of ITO (Table 1), González, et al. (2015) eventually selected 10 reasons that were assessed in empirical studies in both the compared countries. Selected reasons for using ITO were listed as follows:

- Ability to focus on strategic IT issues

The IT department may outsource functions that are not related to the strategy, focusing on those that make up the competitive advantage (Lacity & Hirschheim, 1993).

The rest of the company also benefits from externalizing tasks not related to strategic issues by facilitating contacts with the IT department that accomplishes fewer tasks (Grover, et al., 1994) and can focus on its key competences (Willcocks, et al., 2006).

- Increase the flexibility of the IT department

The use of outsourcing as a method of increasing the flexibility of the IT department is a form of company reorganization or its restructuring (Yang, et al., 2007). It may also relate to a general redesign of contracts to achieve business objectives (Harland, et al., 2005).

In a view of the possibility of reducing the size of running a business, outsourcing may also affect the maintenance of the labor resources needed at a given time (Hayes, et al., 2000).

- Improving the quality of offered services

Outsourcing can increase the quality of IT services, because the technological and personal resources of the supplier are a complement to the resources owned by the client.

The supplier has access to advanced technologies that increase and depreciate fluctuations in the customer demand for resources (Baldwing, et al., 2001).

In addition, the supplier may also have appropriately motivated staff trained in the provision of high-quality services and a high degree of specialization (Al-Gharbi, et al., 2009; Alner, 2001).

- Eliminating routine and problematic tasks

Many tasks performed by the IT department are routine tasks; they do not bring any added value and can be performed by any service provider, because they are not exceptional services (Grover, et al., 1994, 1996; Hayes, et al., 2000).

In many cases, these activities are also seen in the IT department as redundant and unnecessary (McFarlan & Nolan, 1995) or problematic (Jurison, 1995) and, therefore, should be minimized or externalized.

- Facilitate access to new technologies

This is not only about access to the technology provided by the supplier (Lacity et al., 1994) but also about saving in access to its own advanced technology, which should be purchased by investing own funds for its purchase (Gupta & Gupta, 1992). It also allows the use of new technologies to be tested, which reduces the risk of unnecessary investment in new technologies that are not useful to the company (Baldwing, et al., 2001).

- Reduce the risk of technological obsolescence

The ITO provider invests more in new technologies than the recipient; the supplier also bears a greater risk of technological obsolescence, especially of the equipment the supplier uses (Clark, et al., 1995; Grover, et al., 1994, 1996).

- Savings in personnel costs

The work of IT specialists is characterized by a high degree of impairment of the level of education and skills, which is why IT specialists should constantly improve their education (Olson, 2007).

ITO provider is in a better position than the client, because renting IT employees can motivate them better to work and better educate them (Alner, 2001; Ang, Straub, 1998; Cox, et al., 2011), because that is what their business is about.

- Savings in the costs of using technology

ITO providers can achieve savings because of scale and range economies by purchasing IT equipment and using it. These savings can be used by a client who is offered a lower price for the service (Smith, et al., 1998). In addition, outsourcing makes it possible to convert fixed costs (own IT equipment) into variable costs (fee for ITO services), and with the proper construction of an outsourcing contract, costs can be predictable (Cox, et al., 2011).

- Having an alternative to internal IT

The client company has access to internal and external IT resources, both hardware and personal (Claver González, Gascó, Llopis, 2003). This may be conducive to the continued use of ITO as the basic method of ensuring the IT security of the company (Alner, 2001).

- Adapting to fashion

Companies imitate or copy the behavior of other companies that have already achieved success because of the use of ITO (Baldwing, et al., 2001). Good examples of companies using ITO are described in professional journals, also under the pressure of outsourcing service providers (Yang, et al., 2007).

Empirical studies have assessed the importance of these reasons for the use of ITO. It was one of the questions of a comprehensive quantitative survey of ITO in enterprises in Poland and Spain carried out in 2016 and 2013, respectively. On the basis of the aforementioned studies, a comparison of the reasons of using ITO in Polish and Spanish enterprises was carried out.

The research sample in both cases amounted to 200 large enterprises (more than 250 employees) in Poland and 398 enterprises in Spain (including 10.8%, employing up to 50 employees; 58.5%, 51–500 employees; and 28.2 %, more than 500 employees). It should be noted that the category of a large enterprise in Poland and Spain, because of the size of employment is identical; large companies employ more than 250 employees, which was the basic criterion for including large enterprises in Poland.

Table 2. A general comparison of the importance of the reasons for using ITO in Polish and Spanish enterprises
(Source: own elaboration)

No.	Reason	Poland			Spain		
		Mean	Median	Mode	Mean	Median	Mode
1	Improving the quality of services offered	4.82	5	7	4.87	5	7
2	Increasing the flexibility of the IT department	4.80	5	6	5.25	6	7
3	Facilitating access to new technologies	4.78	5	7	4.76	5	6
4	Savings in personnel costs	4.61	5	7	4.26	4	4
5	Ability to focus on strategic IT issues	4.57	5	4	5.74	6	7
6	Savings in the costs of using technology	4.53	5	7	4.23	4	4
7	Reducing the risk of technological obsolescence	4.50	5	7	4.73	5	6
8	Getting rid of routine and problematic tasks	4.42	5	4	4.85	5	6
9	Having an alternative to internal IT	4.12	4	7	4.22	4	5
10	Adapting to fashion, ITO is an irreversible trend	2.27	1	1	1.80	1	1
The answer 1 means <i>not important at all</i> , whereas 7 is <i>very important</i> .							

The reasons of the ITO use were assessed in both studies in the extended 7-point Likert scale, where the answer 1 is *not important at all*, whereas 7 is *very important*.

Table 2 contains a general comparison of the importance of the reasons for the ITO use, ordered in relation to the arithmetic mean value for Polish enterprises. In the case of Polish enterprises, the most important indicated reasons are *improving the quality of services offered*, *increasing the flexibility of the IT department*, and *facilitating access to new technologies*. In the case of Spanish enterprises, it is *the opportunity to focus on strategic IT issues*, *increasing the flexibility of the IT department*, and *improving the quality of services offered*. The least important reason in both countries was *adapting to fashion*. The factsheet shows that the most important reasons indicated in Spanish enterprises are more strategic, whereas in Polish enterprises, they are of a technological nature.

In both countries, the median and mode for the majority of reasons (except for *adapting to fashion*) was 4 and above in the extended Likert scale, which indicates that such values of importance of individual

causes can statistically occur with the highest probability.

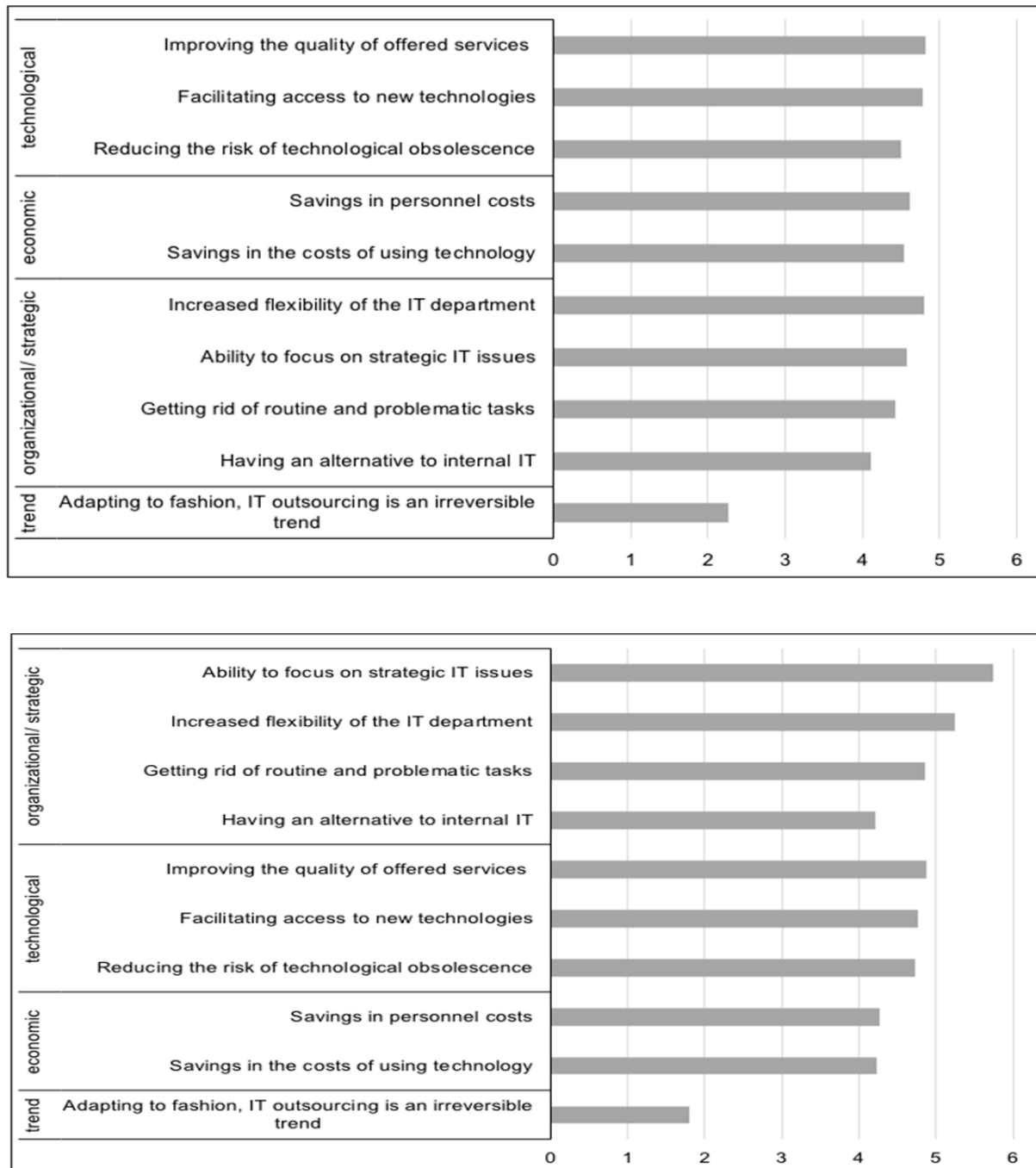
Another comparison was made on the importance of the reasons for the ITO use by dividing the reasons into groups. The grouping of reasons was made using statistical methods – cluster analysis (grouping using the k-means method). As a result of grouping, three groups of reasons were distinguished: economic, technological, organizational/strategic.

The following reasons are included in each group:

- Economical: saving personal and using technology costs,
- Technological: reducing the risk of technological obsolescence, facilitating access to new technologies, improving the quality of offered services,
- Organizational/strategic: increasing the flexibility of the IT department, having an alternative to internal IT, getting rid of routine and problematic tasks, the ability to focus on strategic IT issues.

The reasons *adapting to fashion* and *ITO is an irreversible trend* have not been classified into any of the groups and its validity is presented separately.

Fig. 2 presents the validity of the reasons in both countries compiled into the above-mentioned groups.



The validity of the reasons was assessed in the enlarged Likert scale in which the answer 1 means *not important at all*, whereas 7 is *very important*.

Figure 2. Grouped reasons for the ITO use in (a) Polish and (b) Spanish companies, the arithmetic mean of the validity of the reason
(Source: own elaboration)

The summary of reasons for using ITO in the group shows more clearly the differences in the validity assessment in Polish and Spanish enterprises. The most-valued group of reasons in Spanish enterprises is organizational and strategic reasons, whereas in Polish enterprises, this is technological reasons.

This conclusion is a confirmation of the research hypothesis.

Considering the differences in the assessment of the importance of reasons in Polish and Spanish enterprises, according to the authors, it should be referred in the first place to the issue of the maturity of the

ITO market in both countries. The ITO market in Spain is a market at a similar level of development as markets in other developed countries in Western Europe, America, and Asia. Almost immediately after the appearance of this service in the United States, it was introduced in the countries of Western Europe, where it was intensively developed. Therefore, the ITO market in Spain can be considered as a mature market with a degree of development similar to other developed countries.

The development of the ITO market in Poland followed a bit later. The main reason for the slightly later development of ITO in Poland is our geopolitical and economic situation at the end of the past century. Although the scope of application of ITO in Polish enterprises is currently analogous to its use in Spanish enterprises, the difference in the period of intensive use of ITO may affect the maturity of the ITO market in Poland.

As it was mentioned earlier in relation to business services, very often companies use business services in accordance with their development phases. A similar situation also applies to outsourcing, which was previously mentioned by Trocki (2001). At the beginning, companies use ITO as a method of cost reduction, then they are guided by technological considerations, and in the final phase, these are strategic considerations. Because the ITO market in Spain is a developed market, enterprises are more inclined towards strategic motives. The ITO market in Poland is at a slightly lower stage of development, which is why Polish enterprises are guided more by technological reasons.

The differences identified in the assessment of the validity of the reasons of the use of ITO in Poland and Spain are not large and relate to 2013 and 2016. ITO development is dynamic and the market value is constantly growing. The ITO market in our country is developing very rapidly. Currently, Poland is not only a significant recipient of ITO services but also an important provider of outsourcing services. This is favored by the location of our country, the development of infrastructure, the skills of Polish employees and, above all, price competitiveness based on the difference in labor costs. Therefore, the observed differences may soon not take place.

5 Conclusions

Outsourcing is not only a dynamically developing industry in the modern global economy but also a commonly used concept of management. The popularity of outsourcing arises from many premises, and it may be a greater awareness of managers about the significance of the *make or buy* decision that manifests itself in the enterprise value chain. It may also result from globalization processes, on the one hand (modern companies often operate on the global market), as well as from the progressive specialization of services, on the other hand (companies are often unable to keep up with the development of technology).

The article concerned a comparison of the reasons of using ITO in Polish and Spanish enterprises. The comparison was made based on the own research carried out in Poland in 2016 and Spain in 2013. The research hypothesis is as follows: Representatives of Polish enterprises assess other groups of reasons as the most important motivation for the use of ITO in their companies compared to Spanish enterprises. On the basis of the presented analyzes and considerations, the research hypothesis was positively verified; there are indeed differences in assessing the validity of the reasons for ITO application in Polish and Spanish enterprises, although they are not large. Spanish enterprises most definitely assess organizational and strategic reasons, while Polish enterprises assess technological reasons most. Considering the differences in the assessment of reasons, the authors concluded that the reason for the differences could be differences in the development of the ITO market in both countries. The ITO market seems to be more mature in Spain than that in Poland. At the same time, it has been added that this situation relates to the period considered, that is, 2013 and 2016. As the development of ITO takes place very dynamically, the differences in market development in both countries may have already been leveled or will soon be equal.

As for the directions of further research in the presented area, the range of possible tests is wide. It should be assumed that the differences occurring in determining the validity of reasons of ITO use in both countries may also occur in determining

the validity of risk factors and the validity of benefits from ITO.

Other areas of possible research concern the development of ITO itself. They can be related to digital innovations, automation of processes, and further development of cloud computing services.

As for the trends in the development of outsourcing, IT market analysts forecast the following directions (William, 2017):

- Outsourcing relationships are now more standardized; the client is less guided by the price of the service and more by the course of the process and human resources available,
- Pressure on costs will increase the importance of nonstandard, more flexible outsourcing contracts,
- Outsourcing will be used in small businesses and startups to a greater extent,
- The growing costs of raw materials and transport will favor the use of outsourcing so that low operating costs in enterprises can be maintained,
- More advanced key business functions will be outsourced,
- The position of Latin America and Europe will be stabilized as India's strong competitors and preferred locations for outsourcing companies,
- The importance of outsourcing services provided in the cloud will increase,
- Research and development outsourcing will be carried out to countries with low labor costs, especially to India.

Regardless of the actual directions of outsourcing development, one thing is certain – the development prospects of the outsourcing industry are very good. Both the value of the market and the employment in the industry will increase. Therefore, it is necessary to conduct scientific research in the presented field and to support the development of outsourcing with research results and practical conclusions.

6 References

- [1] Al-Gharbi, K., Al-Kindi, A., Al-Salti, Z., 2009. IT/IS Outsourcing from Omani Organizations' Perspective: Motivations and reservations. *International Journal of Management Innovations Systems*, 1910, pp.1-10.
- [2] Alner, M., 2001. The Effects of Outsourcing in Information Security. *Information System Security*, 10(3), pp.35-43.
- [3] Ang, S., Straub, D., 1998. Production and transaction economies and IS Outsourcing: A Study of U.S. Bank Industry. *MIS Quarterly*, 22(4), pp.535-552.
- [4] Baldwing, L.P., Irani, Z., Love, P., 2001. Outsourcing Information Systems: Drawing lessons from a banking case study. *European Journal of Information Systems*, 10(1), pp.15-24.
- [5] Baranowska-Skimina, A., 2015. Outsourcing IT okiem dużych firm, Available at: eGospodarka.pl, [online], Accessed 01 March 2018.
- [6] Clark, T.D., Zmud, R.W., McCray, G.E., 1995. The Outsourcing of Information Services: Transforming the nature of business in the information industry. *Journal of Information Technology*, 10, pp.221-237.
- [7] Claver, E., González R., Gascó, J., Llopis, J., 2003. Outsourcing informático: razones, reticencias y factores de éxito en las universidades públicas españolas. *Revista Europea de Dirección y Economía de Empresa*, 12(4), pp.87-100.
- [8] Cox, M., Roberts, M., Walton, J., 2011. Motivations for IT Outsourcing in Public Sector Local government. In: *Proceedings of the 2nd International Conference on Information management and Evaluation*, Toronto Canada.
- [9] González, M.R., Gascó, J.L., Llopis, J., 2015. Razones y riesgos del outsourcing de sistemas de información en las grandes empresas españolas. *Revista Europea de Dirección y Economía de la Empresa*, 24, pp.175-189.
- [10] Grover, V., Cheon, M.J., Teng T.C., 1994. The decision to Outsource Information Systems functions. *Journal of Systems Management*, 9(3), pp.44-50.
- [11] Grover, V., Cheon, M.J., Teng T.C., 1996. The effect of service quality and partnership on the Outsourcing of Information systems functions. *Journal of Management Information Systems*, 12(4), pp.89-116.

- [12] Gupta, G., Gupta, H., 1992. Outsourcing the IS functions. Is it necessary for your organization? *Information Systems Management*, 27(1), pp.33-44.
- [13] Harland, Ch., Knight, L., Lamming R., Walker, H., 2005. Outsourcing: Assessing the risks and benefits for organizations, sectors and nations. *International Journal of Operations & Production Management*, 25(9), pp.831-850.
- [14] Hayes, D.C., Hunton, J.E., Reck, J.J., 2000. Information Systems Outsourcing announcements: Investigating the impact of the market value of contract-granting firms. *Journal of Information Systems*, 14(2), pp.109-125.
- [15] Heeks, R., Krishna, S., Nicholson, B., Sahay, S., 2001. Synching or Sinking: Global Software Outsourcing Relationships. *IEEE Software*, 18(2), pp.54-60.
- [16] Jurison, J., 1995. The Role of Risk and Return in Information Technology Outsourcing Decisions. *Journal of Information Technology*, 10(4), pp.239-247.
- [17] Lacity, M., Hirschheim, R., 1993. Implementing Information Systems Outsourcing: Key Issues and Experiences of an Early Adopter. *Journal of General Management*, 19(1), pp.17-31.
- [18] Lacity, M., Hirschheim, R., Willcocks, L., 1994. Realizing Outsourcing Expectations. Incredible Expectations, Credible Outcomes. *Information Systems Management*, 11(4), pp.7-18.
- [19] Marchand, N., Jacobsen, H-A., 2001. An Economic Model to Study Dependencies between Independent Software Vendors and Application Service Providers. *Electronic Commerce Research*, 1(3), pp.315-334.
- [20] McFarlan, F.W., Nolan, R.L. (1995). How to manage IT Outsourcing Alliance. *Sloan Management Review*, 36(2), pp.8-23.
- [21] Olson, D.L., 2007. Evaluation of ERP outsourcing, *Computers & Operations Research*, 34, pp.3715-3724.
- [22] Spoz, A., Słonec, J., Gotowska, M., 2017. *Ekonomiczno-społeczne oblicza gospodarki współdzielenia*. Publisher Texter, Warszawa, pp.67-99.
- [23] Rivo López, E., 1999. Externalización: más allá de la subcontratación, Available at: <file:///C:/Users/Jolanta/Downloads/Dialnet-Externalizacion-565287.pdf> [online], Accessed 01 March 2018.
- [24] Smith, M.A., Mitra, S., Narasimhan, S., 1998. Information Systems Outsourcing: A Study of Pre-Event Firm Characteristics. *Journal of Management Information Systems*, Vol. 15, 2, pp.61-93.
- [25] Trocki, M., 2001. *Outsourcing. Metoda restrukturyzacji działalności gospodarczej*. Warszawa: Państwowe Wydawnictwo Ekonomiczne.
- [26] Willcocks, L.P., Fenny, D., Olson N., 2006. Implementing core IS capabilities: Feeny-Willcocks IT governance and management framework revisited. *European Management Journal*, 24(1), pp.28-37.
- [27] William, J., 2017. Future Outsourcing Trends for 2020, Available at: <https://www.flatworldsolutions.com/articles/outsourcing-trends-for-future.php>, [online], Accessed 01 March 2018.
- [28] Yang, D.-H., Kim, S., Nam, Ch., Min, J.-W., 2007. Developing a decision model for business process outsourcing. *Computers and Operations Research*, 34(2), pp.3769-3778.